



Alkyl Amines Chemicals Limited

**Stock Info**

Bloomberg	AACL IN
Equity Shares (m)	51
M.Cap.(INRb)/(USD\$)	107.6 / 1.3
52-Week Range (INR)	2751 / 1805
1, 6, 12 Rel. Per (%)	-2/-19/-47
12M Avg Val (INR M)	159
Free float (%)	28.0

**Financials Snapshot (INR b)**

Y/E March	FY24	FY25E	FY26E
Sales	14.4	17.3	21.6
EBITDA	2.5	3.2	4.4
PAT	1.5	2.0	2.9
EPS (INR)	29.1	39.4	57.4
EPS Gr. (%)	-34.9	35.5	45.6
BV/Sh.(INR)	247.7	273.6	311.2

**Ratios**

Net D:E	-0.0	-0.1	-0.1
RoE (%)	12.2	15.1	19.6
RoCE (%)	11.5	14.6	18.9
Payout (%)	34.4	34.4	34.4

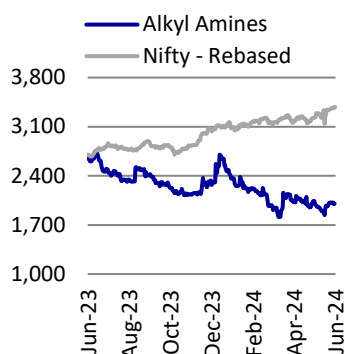
**Valuations**

P/E (x)	72.9	53.8	36.9
P/BV (x)	8.6	7.7	6.8
EV/EBITDA (x)	43.1	33.5	24.0
Div. Yield (%)	0.5	0.6	0.9
FCF Yield (%)	1.4	1.4	1.7

**Shareholding pattern (%)**

As On	Mar-24	Dec-23	Mar-23
Promoter	72.0	72.0	72.0
DII	1.1	1.1	1.1
FII	3.0	2.9	2.8
Others	23.9	24.0	24.1

FII Includes depository receipts

**Stock performance (one-year)**

# Alkyl Amines

**CMP: INR2,104****TP: INR2,010 (-4%)****Neutral**

## R&D, capacity expansion and new products to remain in focus

- AACL focuses on product innovation, waste reduction, and environmental impact, with plans to triple its R&D team and implement a new by-product isolation process in FY25. The company has increased R&D expenses, from 0.43% of revenue in FY19 to 0.65% in FY24 (INR93m), to strengthen its leadership in amines. The total R&D expenditure has increased at a CAGR of 20% in the past 5 years.
- AACL has expanded its ethylamine capacity by 35ktpa (~18% of the total capacity) in Kurkumbh, Maharashtra, with a capex of INR4b and repurposed the old plant to boost methylamine capacity. It aims to diversify its product portfolio as well. There has been pricing pressure amid increased acetonitrile imports from China and, hence, AACL has applied for anti-dumping duty (ADD). In order to beat competition, AACL is working to enhance product quality and production efficiencies.
- AACL increased its aliphatic amines capacity by ~30% in FY24 to ~200ktpa and is introducing new specialty products to enhance margin amid demand challenges. We estimate a ~22% revenue CAGR and a 40% EPS CAGR during FY24-26. Downside risks to our estimates stem from rising competition and raw material price fluctuations. The stock trades at 36.9x FY26E EPS and 24x FY26E EV/EBITDA. We maintain a Neutral rating with a TP of INR2,010.

## R&D at the fore

- AACL has continuously increased its R&D expenses, which has helped the company to become a domestic leader in the world of amines. It increased its R&D expenses as a percentage of revenue from 0.43% in FY19 to 0.65% in FY24. Total R&D expenditure in FY24 was INR93m, with capex of INR15m (INR2m in FY19) and revenue expenditure of INR78m (INR35m in FY19).
- The company operates dedicated R&D centers focusing on developing products and improving existing ones and striving to achieve cost efficiencies. R&D revenue and capital investments are also utilized to minimize waste in terms of liquid effluents and residues. AACL, in FY24, spent 0.5% of its total R&D expenses on reducing the environmental and social impact of the products that it manufactures.
- The R&D team has developed a process to isolate valuable by-products from the waste stream of one of the existing products. It is likely to be implemented in FY25. Pilot trials are going on for two complex specialty products that the team has developed with backward integration (likely to start commercial production in FY26). The company also plans to triple the size of its R&D team in the foreseeable future.

## Expect AACL to navigate through multiple challenges

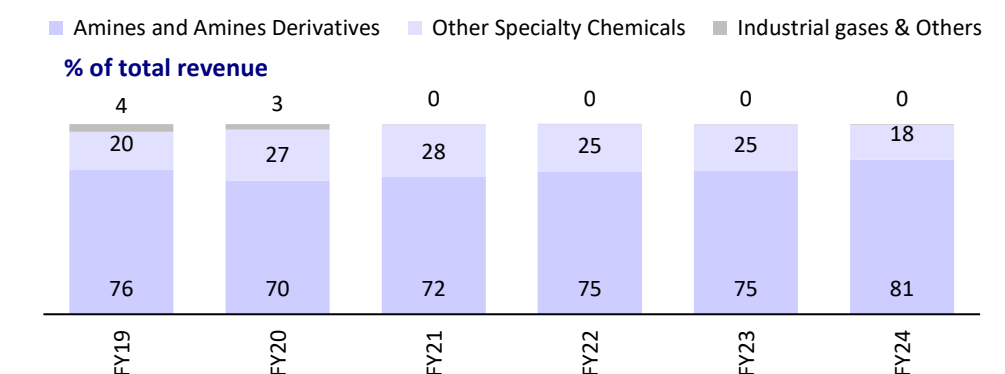
- AACL has expanded its capacity of ethylamine at Kurkumbh by setting up a new plant with a capacity ~35ktpa in FY24 in order to meet the growing demand with a capex outlay of INR4b. The old ethylamine plant would, therefore, be now utilized to manufacture Methylamines, which would, in turn, enhance the capacity of the product. AACL is also adding new products and investing in the upgradation of the existing capacities.

- There are a range of products, today, that contribute 15-20% each to total revenue of AACL. The management is expanding its product portfolio to diversify its offerings and reduce dependency on a single product to 10%. That said, the management also targets to have a 5-10% contribution to revenue from new products every year, which it has not been able to achieve so far.
- There has been pricing pressure in some of the products of the company for quite some time now and the management expects it to continue, although prices of some products have stabilized now. Due to an increase in acrylonitrile production in China, dumping of low-priced imports of acetonitrile continues to increase, resulting in a reduction in its sales and creating margin pressures.
- AACL has applied for ADD for two of its products Acetonitrile (ACN) and Mono Iso Propyl Alcohol (MIPA), which is expected by end-FY25. All derivatives and specialty chemicals that AACL is getting into have Chinese competitors, but the management is confident of navigating through this challenge by focusing on better quality and improving production efficiencies.

### Valuation and view

- AACL has boosted its aliphatic amines capacity by ~30% in FY24. The total capacity stands at ~200ktpa (including derivatives and specialty chemicals). Additionally, AACL is venturing into new specialty products that are likely to improve its margins amid robust demand (near-term headwinds persist) for amine derivatives and specialties.
- Over FY24-26, we estimate a ~22% revenue CAGR and a 40% EPS CAGR (due to a lower base in FY24). The key risk to our outlook is high competition (domestic and imports, mainly from China), leading to limited pricing power. Commodity nature of some of the products could also make AACL susceptible to raw material price fluctuations. Upside risk could be implementation of ADD.
- The stock is trading at 36.9x FY26E EPS and 24x FY26E EV/EBITDA. We reiterate our Neutral rating on AACL with a TP of INR2,010, based on 35x FY26E EPS.

**Exhibit 1: Amines and Amines Derivatives contributed 81% to total revenue in FY24 (%)**

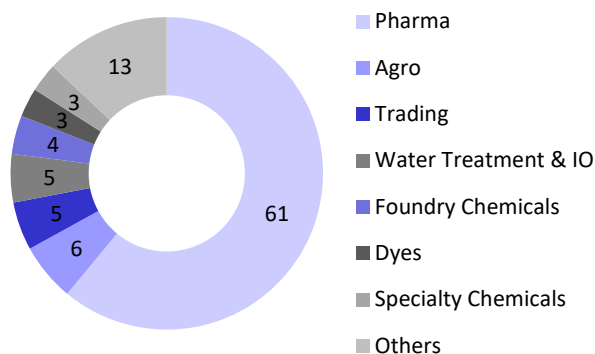


Source: Company, MOFSL

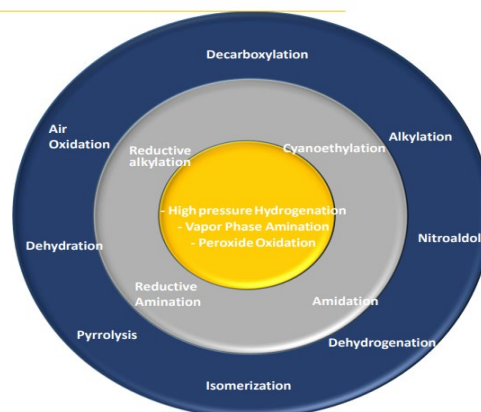
**Exhibit 2: Specialty Chemicals hit by pricing pressure in Acetonitrile in FY24**

Particulars	Products/Services sold by the entity (INR b)		% of total products/ services sold by the entity	
	FY23	FY24	FY23	FY24
Aliphatic Amines	7.9	6.7	47	47
Amine Derivatives	4.9	4.9	29	34
Specialty Chemicals / Amines	4.0	2.7	24	19
<b>Total</b>	<b>16.8</b>	<b>14.4</b>	<b>100</b>	<b>100</b>

Source: Company, MOFSL

**Exhibit 3: Agro and pharma are the major end user industries for AACL (%)****Industry profile**

\*as of FY20 but mix hasn't changed much

**Exhibit 4: Technical expertise of AACL**

Source: Company, MOFSL

**Exhibit 5: Diversified product portfolio of the company**

Aliphatic Amines	Amines Derivatives	Specialty Chemicals
<ul style="list-style-type: none"> <li>Methylamines</li> <li>Ethylamines</li> <li>N-Propylamines</li> <li>Isopropylamines</li> <li>N-Butylamines</li> <li>Cyclohexylamines</li> <li>Ethylhexylamines</li> <li>Furfurylamine</li> </ul>	<ul style="list-style-type: none"> <li>Dimethylamine Hydrochloride (DMAHCL)</li> <li>Diethylamine Hydrochloride (DEAHCL)</li> <li>Triethylamine Hydrochloride (TEAHCL)</li> <li>3-Ethoxyl Propylamine (ETOPA)</li> <li>3-(Methylaminopropyl)amine (MAPA)</li> <li>Dimethyl Amino Propylamine (DMAPA)</li> <li>3-2(-Ethylhexyloxy)Propylamine (2EHOPA)</li> <li>N-Methylbenzylamine (NMBA)</li> <li>N,N-Diisopropylethylamine (DIPEA)</li> <li>Diethylhydroxylamine (DEHA)</li> <li>Diethyl Toluamide (DEET)</li> <li>Diethyl Phenyl Acetamide (DEPA)</li> <li>Ethyl methyl amine (EMA)</li> <li>Dimethyl isopropylamine (DMIPA)</li> <li>N,N-Bis-(3-aminopropyl)-methylamine (MIBPA)</li> </ul>	<ul style="list-style-type: none"> <li>Acetonitrile</li> <li>1,8-Diazabicyclo[5.4.0]undec-7-ene (DBU)</li> <li>Diethylketone (DEK)/3-Pentanone</li> <li>Alchan 100</li> <li>Alchan 300</li> <li>2-Aminoethoxyethanol (DGA)</li> <li>2-Ethoxyethylamine (EOEA)</li> <li>Dimethyl Propylene Urea (DMPU)</li> <li>Tetramethyl ethylenediamine (TMEDA)</li> <li>Monomethylamine 25% in MEOH</li> <li>Monomethylamine 30% in MEOH</li> <li>Dimethylaminopropionitrile (DMAPN)</li> <li>N-Benzylethanolamine (NBEA)</li> <li>Morpholine</li> <li>1,5-Diazabicyclo[4.3.0]non-5-ene (DBN)</li> </ul>

Source: Company, MOFSL

**Exhibit 6: AACL has significantly increased its focus on R&D expenses**

R&D Expenditure (INR m)	FY19	FY20	FY21	FY22	FY23	FY24
Capital Expenditure	2	2	-	0	9	15
Revenue Expenditure	35	41	50	57	67	78
<b>Total Expenditure</b>	<b>37</b>	<b>43</b>	<b>50</b>	<b>57</b>	<b>76</b>	<b>93</b>
Total R&D expenditure as % of total turnover	0.43	0.44	0.40	0.37	0.45	0.65

Source: Company, MOFSL

**Exhibit 7: R&D expenses and capex in specific technologies to total R&D and capex**

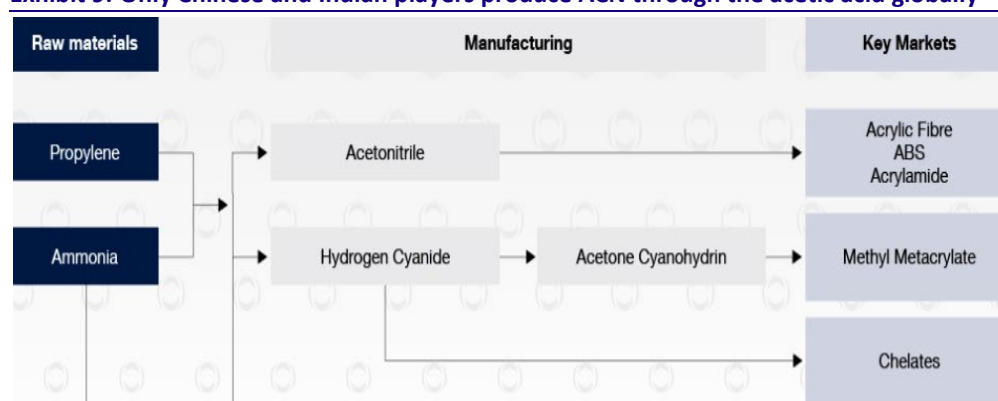
% R&D and capex investments to total R&D and capex investments	FY23 (%)	FY24 (%)	Improvements in environmental and social impacts
R&D	0.4	0.5	All R&D revenue and capital investments are focused on minimizing waste in terms of liquid effluent and residues by reviewing the existing processes and process development and improvement for new products and the implementation of optimized processes in production.
Capex	0.7	1.3	Installation of reverse osmosis and multi effect evaporator at Kurkumbh and Dahej plants. All the three plants shall have zero liquid discharge system installed next year. AACL has installed solar power plants at Bhoom, Osmanabad, and at Manwath, Parbhani in Maharashtra.

Source: Company, MOFSL

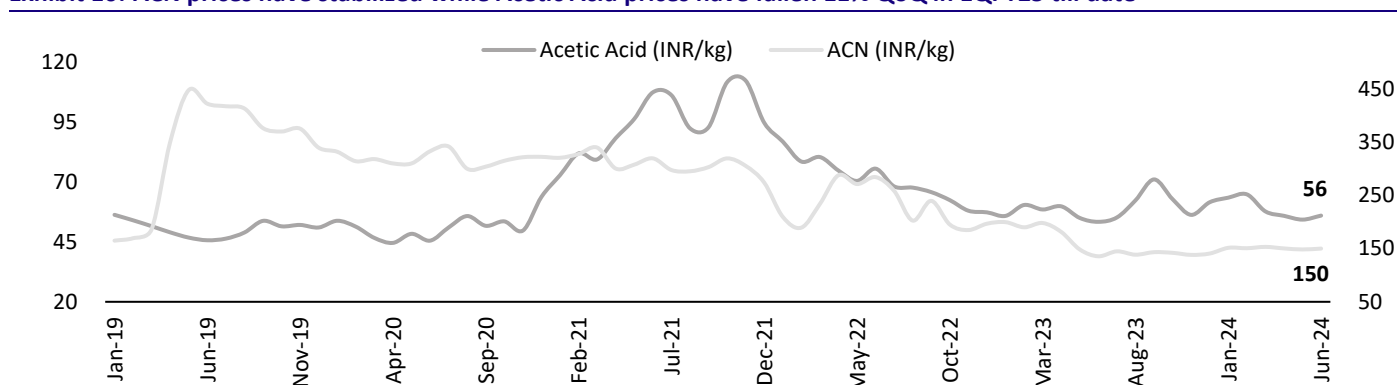
**Exhibit 8: Cash conversion cycle at 143 days in FY24**

Cash conversion cycle (year-end basis)	FY19	FY20	FY21	FY22	FY23	FY24
Days						
Inventory	46	31	36	39	40	44
Debtor	66	60	67	66	56	56
Creditor	56	27	53	54	41	44
<b>Cash conversion cycle</b>	<b>168</b>	<b>119</b>	<b>155</b>	<b>159</b>	<b>137</b>	<b>143</b>

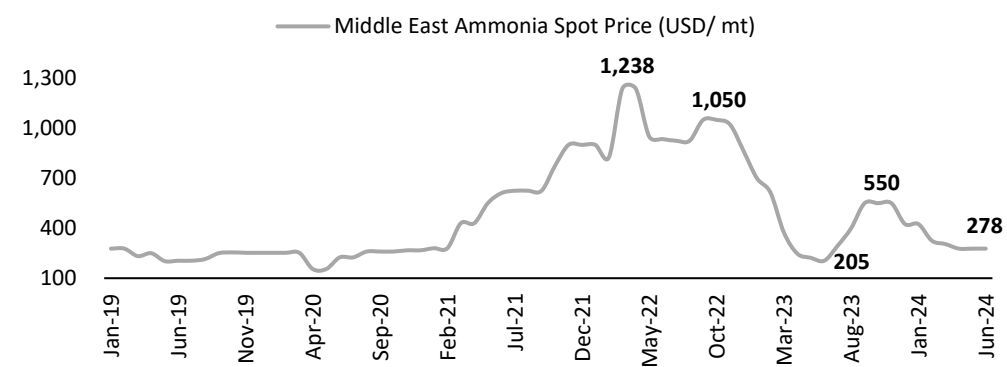
Source: Company, MOFSL

**Exhibit 9: Only Chinese and Indian players produce ACN through the acetic acid globally**

Source: INEOS Nitriles, MOFSL

**Exhibit 10: ACN prices have stabilized while Acetic Acid prices have fallen 11% QoQ in 1QFY25 till date**

Source: IndianPetroChem, MOFSL

**Exhibit 11: Ammonia prices have stabilized as of now**

Source: Bloomberg, MOFSL

**Exhibit 12: Peer comparison for our coverage universe**

Spec Chem	Reco	TP (INR)	EPS (INR)			P/E (x)			P/BV (x)			EV/EBITDA (x)			ROE (%)		
			FY24	FY25E	FY26E	FY24	FY25E	FY26E	FY24	FY25E	FY26E	FY24	FY25E	FY26E	FY24	FY25E	FY26E
Alkyl Amines	Neutral	2,010	29.1	39.4	57.4	68.9	50.9	34.9	8.1	7.3	6.4	40.8	31.7	22.7	12.2	15.1	19.6
Atul	Neutral	5,670	103.4	131.0	162.0	60.2	47.5	38.4	3.6	3.4	3.1	29.3	25.3	21.7	6.2	7.3	8.4
Clean Science	Neutral	1,375	23.0	27.9	34.4	60.7	49.9	40.6	12.3	10.1	8.3	44.6	38.7	31.1	22.1	22.3	22.5
Deepak Nitrite	Neutral	2,320	55.1	69.2	77.3	45.0	35.9	32.1	7.1	6.0	5.2	29.9	23.5	20.8	16.9	18.1	17.3
Fine Organic	Sell	3,785	120.0	109.9	108.1	39.3	43.0	43.7	7.8	6.7	5.9	28.1	29.8	29.6	21.8	16.7	14.3
Galaxy Surfact.	Buy	3,450	85.0	98.5	115.0	31.2	27.0	23.1	4.3	3.9	3.4	20.1	16.8	14.4	14.8	15.1	15.7
Navin Fluorine	Neutral	3,110	46.1	62.7	88.9	78.8	58.0	40.9	7.6	6.9	6.1	48.5	36.4	27.2	10.0	12.4	15.9
NOCIL	Neutral	260	7.9	10.2	13.0	35.5	27.4	21.5	2.8	2.6	2.4	24.0	17.5	14.0	8.1	9.8	11.7
P I Industries	Buy	4,280	110.6	111.8	131.9	33.0	32.6	27.7	6.3	5.4	4.6	25.6	21.5	18.1	21.1	17.9	17.9
SRF	Neutral	2,140	47.5	56.5	73.0	50.9	42.7	33.1	6.3	5.7	5.0	28.6	23.6	19.3	13.0	13.9	16.0
Tata Chemicals	Neutral	980	36.1	34.9	50.4	30.6	31.7	21.9	1.3	1.2	1.2	11.4	11.5	9.4	4.4	4.0	5.5
Vinati Organics	Buy	2,080	31.2	42.3	52.0	61.5	45.3	36.9	8.1	7.1	6.2	42.0	31.2	25.7	13.8	16.7	17.9

Source: Company, MOFSL

## Story in charts

Exhibit 13: Expect ~22% revenue CAGR over FY24-26...

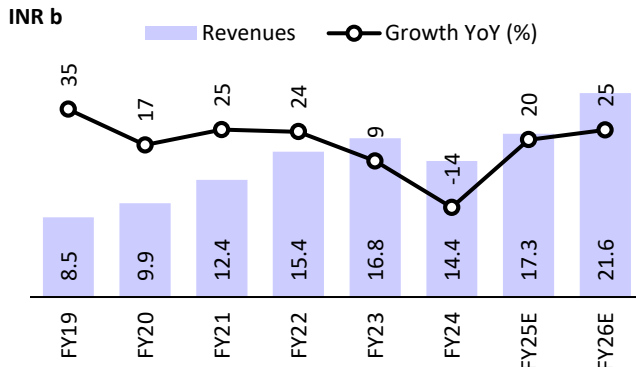


Exhibit 14: ...with revenue mix remaining constant (%)

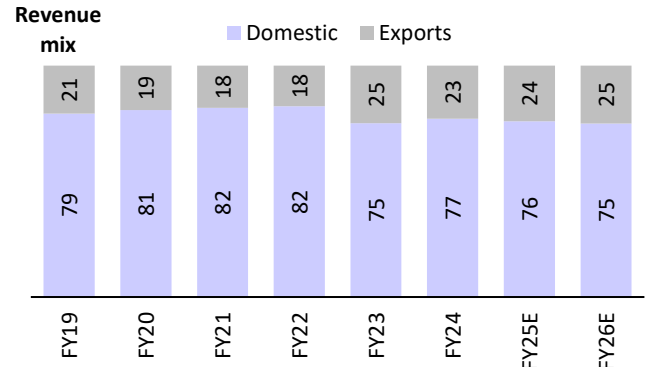


Exhibit 15: Expect EBITDA margin to improve to ~21%...

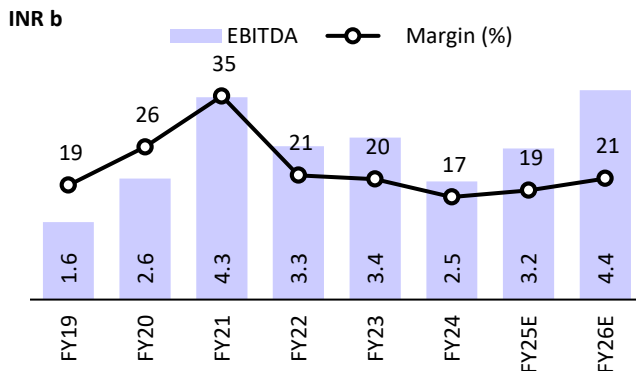


Exhibit 16: ...with PAT margin expanding by FY24

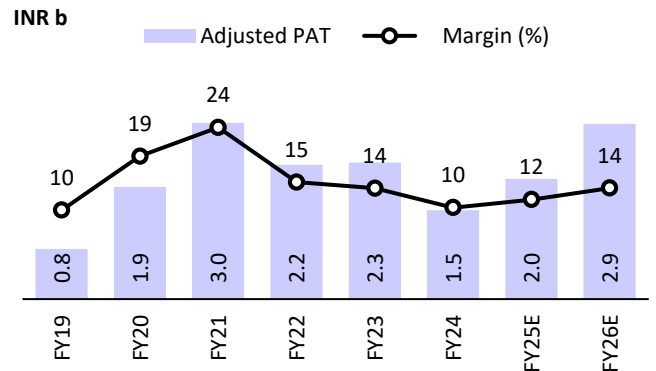


Exhibit 17: One-year forward P/E ratio trades at 45.8x...

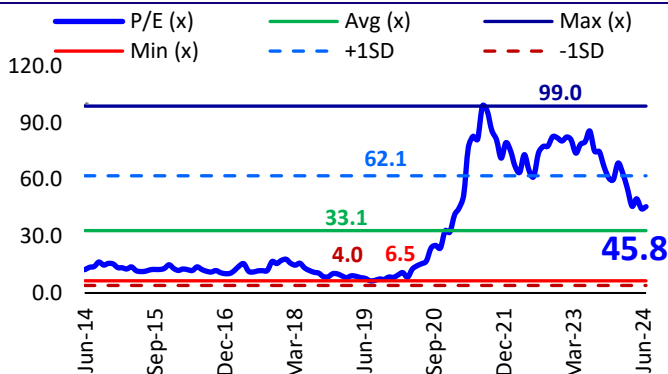


Exhibit 18: ...with return ratios increasing to 19-20%

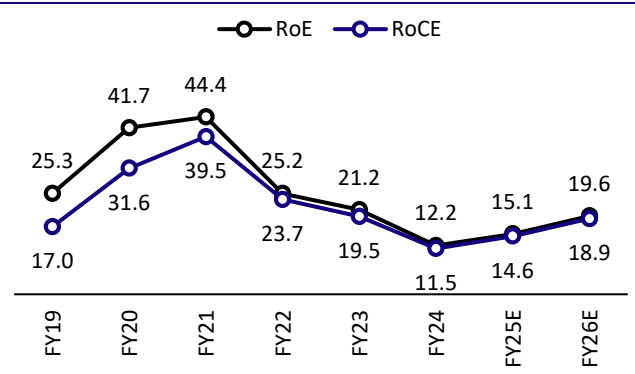


Exhibit 19: Expect strong FCF generation over FY25-26

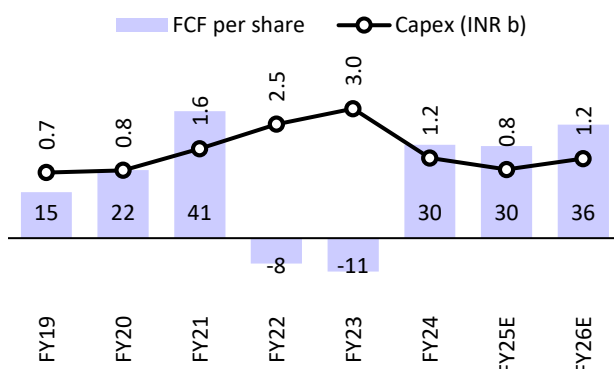
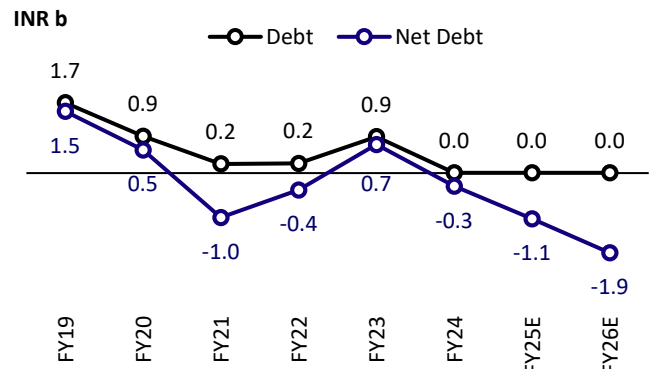


Exhibit 20: Expect AACL to remain net cash



Source: Company, MOFSL

Source: Company, MOFSL

## Financials and valuations

### Standalone Income Statement

(INR m)

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
<b>Total Income from Operations</b>	<b>8,464</b>	<b>9,929</b>	<b>12,424</b>	<b>15,420</b>	<b>16,831</b>	<b>14,406</b>	<b>17,287</b>	<b>21,609</b>
Change (%)	35.5	17.3	25.1	24.1	9.1	-14.4	20.0	25.0
Gross Margins (%)	45.5	51.2	57.9	45.8	48.9	46.7	46.4	46.0
<b>EBITDA</b>	<b>1,644</b>	<b>2,570</b>	<b>4,291</b>	<b>3,252</b>	<b>3,439</b>	<b>2,507</b>	<b>3,203</b>	<b>4,441</b>
Margin (%)	19.4	25.9	34.5	21.1	20.4	17.4	18.5	20.6
Depreciation	233	269	291	348	452	589	617	628
<b>EBIT</b>	<b>1,410</b>	<b>2,301</b>	<b>4,001</b>	<b>2,904</b>	<b>2,987</b>	<b>1,918</b>	<b>2,586</b>	<b>3,813</b>
Int. and Finance Charges	148	103	63	33	33	44	48	51
Other Income	39	70	70	150	132	151	157	163
<b>PBT bef. EO Exp.</b>	<b>1,302</b>	<b>2,269</b>	<b>4,007</b>	<b>3,021</b>	<b>3,086</b>	<b>2,025</b>	<b>2,695</b>	<b>3,925</b>
EO Items	0	328	0	0	0	0	0	0
<b>PBT after EO Exp.</b>	<b>1,302</b>	<b>2,597</b>	<b>4,007</b>	<b>3,021</b>	<b>3,086</b>	<b>2,025</b>	<b>2,695</b>	<b>3,925</b>
Total Tax	464	444	1,054	772	799	536	678	988
Tax Rate (%)	35.7	17.1	26.3	25.6	25.9	26.5	25.2	25.2
<b>Reported PAT</b>	<b>837</b>	<b>2,153</b>	<b>2,953</b>	<b>2,249</b>	<b>2,287</b>	<b>1,489</b>	<b>2,017</b>	<b>2,937</b>
<b>Adjusted PAT</b>	<b>837</b>	<b>1,881</b>	<b>2,953</b>	<b>2,249</b>	<b>2,287</b>	<b>1,489</b>	<b>2,017</b>	<b>2,937</b>
Change (%)	30.3	124.5	57.0	-23.9	1.7	-34.9	35.5	45.6
Margin (%)	9.9	18.9	23.8	14.6	13.6	10.3	11.7	13.6

### Standalone Balance Sheet

(INR m)

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
Equity Share Capital	102	102	102	102	102	102	102	102
Total Reserves	3,548	5,264	7,822	9,796	11,587	12,569	13,893	15,821
<b>Net Worth</b>	<b>3,650</b>	<b>5,366</b>	<b>7,924</b>	<b>9,898</b>	<b>11,689</b>	<b>12,671</b>	<b>13,995</b>	<b>15,923</b>
Total Loans	1,653	866	216	227	855	6	6	6
Deferred Tax Liabilities	507	404	414	472	560	737	737	737
<b>Capital Employed</b>	<b>5,810</b>	<b>6,636</b>	<b>8,554</b>	<b>10,598</b>	<b>13,104</b>	<b>13,415</b>	<b>14,739</b>	<b>16,667</b>
Gross Block	4,280	4,971	5,315	7,663	9,013	13,307	14,107	15,307
Less: Accum. Deprn.	515	736	1,026	1,374	1,825	2,415	3,032	3,660
<b>Net Fixed Assets</b>	<b>3,764</b>	<b>4,235</b>	<b>4,288</b>	<b>6,290</b>	<b>7,187</b>	<b>10,892</b>	<b>11,075</b>	<b>11,647</b>
Capital WIP	432	449	1,376	1,426	3,525	356	356	356
<b>Total Investments</b>	<b>14</b>	<b>0</b>	<b>302</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Curr. Assets, Loans, and Adv.</b>	<b>3,275</b>	<b>3,150</b>	<b>5,486</b>	<b>5,997</b>	<b>5,207</b>	<b>4,589</b>	<b>6,214</b>	<b>8,296</b>
Inventory	1,057	837	1,219	1,645	1,837	1,720	2,064	2,579
Account Receivables	1,526	1,642	2,280	2,767	2,584	2,217	2,661	3,326
Cash and Bank Balance	202	323	1,260	626	182	314	1,084	1,884
Cash	193	312	961	379	172	304	1,074	1,874
Bank Balance	8	10	299	247	10	10	10	10
Loans and Advances	490	349	727	959	604	338	406	507
<b>Curr. Liability and Prov.</b>	<b>1,676</b>	<b>1,198</b>	<b>2,899</b>	<b>3,116</b>	<b>2,815</b>	<b>2,422</b>	<b>2,906</b>	<b>3,633</b>
Account Payables	1,304	748	1,790	2,285	1,897	1,719	2,063	2,579
Other Current Liabilities	264	354	1,002	730	790	559	671	839
Provisions	107	97	107	101	128	144	172	215
<b>Net Current Assets</b>	<b>1,599</b>	<b>1,952</b>	<b>2,587</b>	<b>2,882</b>	<b>2,392</b>	<b>2,167</b>	<b>3,307</b>	<b>4,663</b>
<b>Appl. of Funds</b>	<b>5,810</b>	<b>6,635</b>	<b>8,554</b>	<b>10,598</b>	<b>13,104</b>	<b>13,415</b>	<b>14,739</b>	<b>16,667</b>



## Financials and valuations

### Ratios

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
<b>Basic (INR)</b>								
EPS	16.4	36.9	57.9	44.0	44.7	29.1	39.4	57.4
EPS Growth (%)	30.3	124.5	57.0	-24.0	1.6	-34.9	35.5	45.6
Cash EPS	21.0	42.1	63.6	50.8	53.5	40.6	51.5	69.7
BV/Share	71.5	105.2	155.3	193.7	228.6	247.7	273.6	311.2
DPS	3.4	8.7	16.0	10.0	10.0	10.0	13.5	19.7
Payout (%)	20.6	20.6	27.7	22.7	22.4	34.4	34.4	34.4
<b>Valuation (x)</b>								
P/E ratio	129.2	57.5	36.6	48.2	47.4	72.9	53.8	36.9
Cash P/E ratio	101.0	50.3	33.3	41.7	39.6	52.2	41.2	30.4
P/BV ratio	29.6	20.2	13.7	10.9	9.3	8.6	7.7	6.8
EV/Sales ratio	13.0	11.0	8.6	7.0	6.5	7.5	6.2	4.9
EV/EBITDA ratio	66.7	42.3	25.0	33.2	31.7	43.1	33.5	24.0
Dividend Yield (%)	0.2	0.4	0.8	0.5	0.5	0.5	0.6	0.9
FCF per share	14.8	21.8	40.7	-8.1	-10.7	29.9	29.5	36.4
<b>Return Ratios (%)</b>								
RoE	25.3	41.7	44.4	25.2	21.2	12.2	15.1	19.6
RoCE	17.0	31.6	39.5	23.7	19.5	11.5	14.6	18.9
RoIC	17.9	34.6	51.4	30.5	24.7	12.7	14.9	20.6
<b>Working Capital Ratios</b>								
Fixed Asset Turnover (x)	2.3	2.5	2.9	2.9	2.5	1.6	1.6	1.9
Asset Turnover (x)	1.5	1.5	1.5	1.5	1.3	1.1	1.2	1.3
Inventory (Days)	46	31	36	39	40	44	44	44
Debtor (Days)	66	60	67	66	56	56	56	56
Creditor (Days)	56	27	53	54	41	44	44	44
<b>Leverage Ratio (x)</b>								
Current Ratio	2.0	2.6	1.9	1.9	1.8	1.9	2.1	2.3
Interest Coverage Ratio	9.5	22.4	63.2	88.5	89.9	43.6	54.1	74.8
Net Debt/Equity ratio	0.4	0.1	-0.1	0.0	0.1	0.0	-0.1	-0.1

### Standalone Cash Flow Statement

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
<b>(INR m)</b>								
OP/(Loss) before Tax	1,302	2,597	4,007	3,021	3,086	2,025	2,695	3,925
Depreciation	233	269	291	348	452	589	617	628
Interest Expenses	148	103	63	38	33	44	48	51
Others	51	-308	1	-48	55	34	0	0
Direct Taxes Paid	-356	-581	-1,012	-744	-714	-346	-678	-988
(Inc.)/Dec. in WC	64	-193	290	-569	-428	404	-371	-556
<b>CF from Operations</b>	<b>1,442</b>	<b>1,886</b>	<b>3,640</b>	<b>2,046</b>	<b>2,484</b>	<b>2,750</b>	<b>2,311</b>	<b>3,060</b>
(Inc.)/Dec. in FA	-689	-771	-1,561	-2,462	-3,030	-1,220	-800	-1,200
<b>Free Cash Flow</b>	<b>753</b>	<b>1,115</b>	<b>2,079</b>	<b>-415</b>	<b>-546</b>	<b>1,530</b>	<b>1,511</b>	<b>1,860</b>
Change in Investments	0	343	-587	369	237	-3	0	0
Others	21	22	21	36	22	9	0	0
<b>CF from Investments</b>	<b>-668</b>	<b>-407</b>	<b>-2,127</b>	<b>-2,057</b>	<b>-2,771</b>	<b>-1,215</b>	<b>-800</b>	<b>-1,200</b>
Issue of Shares	0	0	4	7	12	8	0	0
Inc./(Dec.) in Debt	-268	-797	-381	-228	616	-848	0	0
Interest Paid	-150	-107	-68	-40	-31	-44	-48	-51
Dividend Paid	-172	-443	-408	-306	-511	-511	-693	-1,009
Others	-13	-13	-11	-5	-6	-8	0	0
<b>CF from Fin. Activity</b>	<b>-603</b>	<b>-1,360</b>	<b>-864</b>	<b>-572</b>	<b>80</b>	<b>-1,404</b>	<b>-741</b>	<b>-1,060</b>
<b>Inc./Dec. in Cash</b>	<b>171</b>	<b>119</b>	<b>649</b>	<b>-582</b>	<b>-206</b>	<b>132</b>	<b>770</b>	<b>800</b>
Opening Balance	22	193	312	961	379	172	304	1,074
<b>Closing Balance</b>	<b>193</b>	<b>313</b>	<b>962</b>	<b>379</b>	<b>172</b>	<b>304</b>	<b>1,074</b>	<b>1,874</b>



## NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

#### Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on [www.motilaloswal.com](http://www.motilaloswal.com). MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://online.reports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at [www.nseindia.com](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com). Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

#### Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

#### For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

#### For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered/qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

#### For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets (Singapore) Pte. Ltd. ("MOCMSPL") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL.

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to [grievances@motilaloswal.com](mailto:grievances@motilaloswal.com).

Nainesh Rajani

Email: [nainesh.rajani@motilaloswal.com](mailto:nainesh.rajani@motilaloswal.com)

Contact: (+65) 8328 0276

#### Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)

- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

#### Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

#### Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

#### Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, nor its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com.

Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dp@grievances@motilaloswal.com.